



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|-------------------------------|------------------------|
| 10/676,433 | 09/30/2003 | Sandeep K. Gopisetty | ARC920030047US1 | 3426 |
| 7590 Mark C. McCabe IBM Corporation IP Law C4TA/J2B 650 Harry Road San Jose, CA 95120 | | | EXAMINER KEEFER, MICHAEL E | |
| | | | ART UNIT 2154 | PAPER NUMBER |
| | | | MAIL DATE 07/30/2007 | DELIVERY MODE PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|---|--|
| Office Action Summary | Application No. 10/676,433 | Applicant(s) GOPISETTY ET AL. | |
| | Examiner Michael E. Keefer | Art Unit 2154 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-5,7 and 9-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-5,7 and 9-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 July 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is responsive to the Amendment filed 7/10/2007.

Claim Objections

2. Claims 2, 6, 8, and 12-13 are objected to because of the following informalities:

When a claim is cancelled, the claim text should no longer be presented. See 37 CFR 1.121 (c)(4)(i).

Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuzaki et al. (US 2003/0189929), hereafter Matsuzaki in view of Peloquin et al. (US 6449705), hereafter Peloquin.

Regarding **claim 1**, Matsuzaki discloses:

A method of generating a network zone plan, comprising:

collecting device connectivity information for devices in a network; ([0055] states that the information necessary for system construction is input into the system. In [0056] it describes that the first part of information required is about physical devices, and that the second part is about the connections between the devices. Inherently, in order for this information to be input, it must be collected.)

performing an analysis on the collected information to infer relationships between the devices; (This analysis of the collected information is inherently

performed in order to supply the third information listed in the last three lines of [0056], i.e. access path data.)

identifying policies to be utilized in generating a zone plan of the network wherein said policies include type of storage device and grouping (These policies are identified in [0080] as access path data is input into the system as well as being identified as essential data in [0056] in addition to the types of devices and their physical groupings); and

generating the zone plan based on a combination of the analysis performed and the identified zoning policies. (the zone plan is generated in [0081] (i.e. "access path connection command files").

implementing the zone plan in a storage area network (SAN). (Note the title of the invention specifies the solution is for a Storage Area Network, and that the specification continuously refers to a SAN (Storage Area Network.)

Matsuzaki discloses all the limitations of claim 1 except for the use of granularity as a policy.

The general concept of using a policy of granularity in creating zones is well known in the art as taught by Peloquin. (Col. 6 lines 10-22 discloses a maximum and minimum size of a zone, thus the granularity of the zone (i.e. the minimum size.))

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Matsuzaki with the general concept of using a policy of

granularity in creating zones as taught by Peloquin in order to allow for more efficient management of system resources.

5. Claims 1 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hsieh et al. (US 6751702), hereafter Hsieh in view of Peloquin.

Regarding **claims 1 and 7**, Hsieh discloses:

A method of generating a network zone plan, comprising:

collecting device connectivity information for devices in a network; (this collection must inherently take place in order to create the data model in Fig. 8)

performing an analysis on the collected information to infer relationships between the devices; (this analysis is also performed inherently in order to be able to create the relationships between devices on the network that are shown in the data model)

identifying policies to be utilized in generating a zone plan of the network wherein said policies include type of storage device, and grouping; (these policies are defined by the controller in the storage system, see Col. 19, lines 54-67 which detail setting up the policies for a host that effect the zoning for that host); and

generating the zone plan based on a combination of the analysis performed and the identified zoning policies. (Fig. 7, Step 702, which is described as Creating a Path through the switching matrix by Zoning in Col. 20, lines 1-8.)

Hsieh further discloses that the method may be implemented in a computer readable medium.

implementing the zone plan in a storage area network (SAN). (Col. 3, lines 24-28, state that the system and method are regarding a networked data storage device, making the network a Storage Area Network.)

Hsieh discloses all the limitations of claims 1 and 7 except for the use of granularity as a policy.

The general concept of using a policy of granularity in creating zones is well known in the art as taught by Peloquin. (Col. 6 lines 10-22 discloses a maximum and minimum size of a zone, thus the granularity of the zone (i.e. the minimum size.))

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Matsuzaki with the general concept of using a policy of granularity in creating zones as taught by Peloquin in order to allow for more efficient management of system resources.

6. Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuzaki and Peloquin as applied to claim 1 above, and further in view of Tawil et al. (US2002/0103913), hereafter Tawil.

Regarding **claims 3-5**, Matsuzaki discloses:

wherein the devices include host systems (Server 100) to access data and storage subsystems (Storage 200) which are providers of data. (See Fig. 1)

Matsuzaki and Peloquin teach all the limitations of claims 3-5 except for a zone dictating which devices are visible to each other, or being a network-layer access control mechanism that dictates which storage subsystems are visible to which hosts.

The general concept of zones controlling network visibility between devices is well-known in the art as taught by Tawil. (See [0010], "Devices in the same zone can see each other but devices in different zones cannot see each other.")

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Matsuzaki and Peloquin with the general concept of zones controlling network visibility between devices as taught by Tawil in order to conserve the port login resources of a storage device. (Tawil [0010], lines 1-2)

7. Claims 3-5 and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hsieh and Peloquin as applied to claims 1 and 7 above, and further in view of Tawil.

Regarding **claims 3-5 and 9-11**, Hsieh discloses:

wherein the devices include host systems (Hosts 1-N) to access data and storage subsystems (Central Storage Device 8) which are providers of data. (See Fig. 1)

Hsieh and Peloquin teach all the limitations of claims 3-5 and 9-11 except for a zone dictating which devices are visible to each other, or being a network-layer access control mechanism that dictates which storage subsystems are visible to which hosts.

The general concept of zones controlling network visibility between devices is well-known in the art as taught by Tawil. (See [0010], "Devices in the same zone can see each other but devices in different zones cannot see each other.")

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Hsieh and Peloquin with the general concept of zones controlling

network visibility between devices as taught by Tawil in order to conserve the port login resources of a storage device. (Tawil [0010], lines 1-2)

Response to Arguments

8. Applicant's arguments with respect to claims 1, 3-5, 7, and 9-11 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael E. Keefer whose telephone number is (571) 270-1591. The examiner can normally be reached on Monday through Friday 5:30am-2pm.


NATHAN FLYNN
SUPERVISORY PATENT EXAMINER

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MEK 7/18/2007